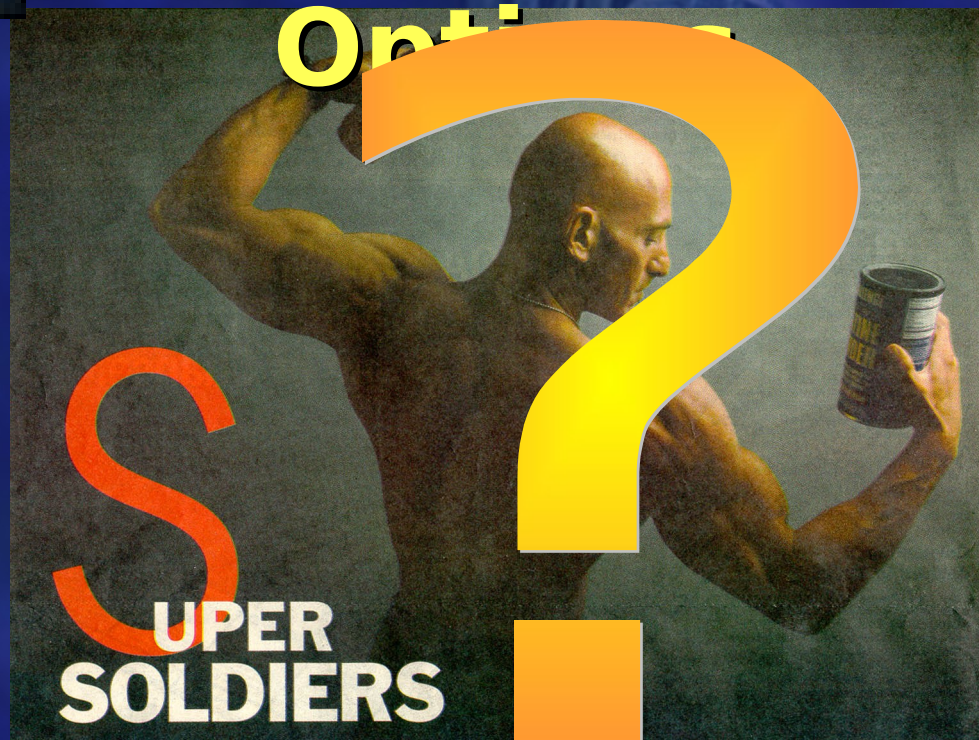


Use
“Supplement
Sense” to
Consider Your
Options

>> Name<<

>> Title<<

>> Organization<<



Purpose

- Learn to make dietary supplement choices based on sound, scientific research instead of marketing claims.
- Learn to use food as the primary way to achieve your nutrition and fitness goals.

The background of the slide is a dark blue gradient. In the top-left corner, there is a cluster of various pills and capsules in different colors (white, red, blue, green, brown). In the bottom-right corner, there is a balance scale, also with various pills scattered around it. The word "Outline" is written in a large, bold, yellow font with a black outline, centered at the top of the slide.

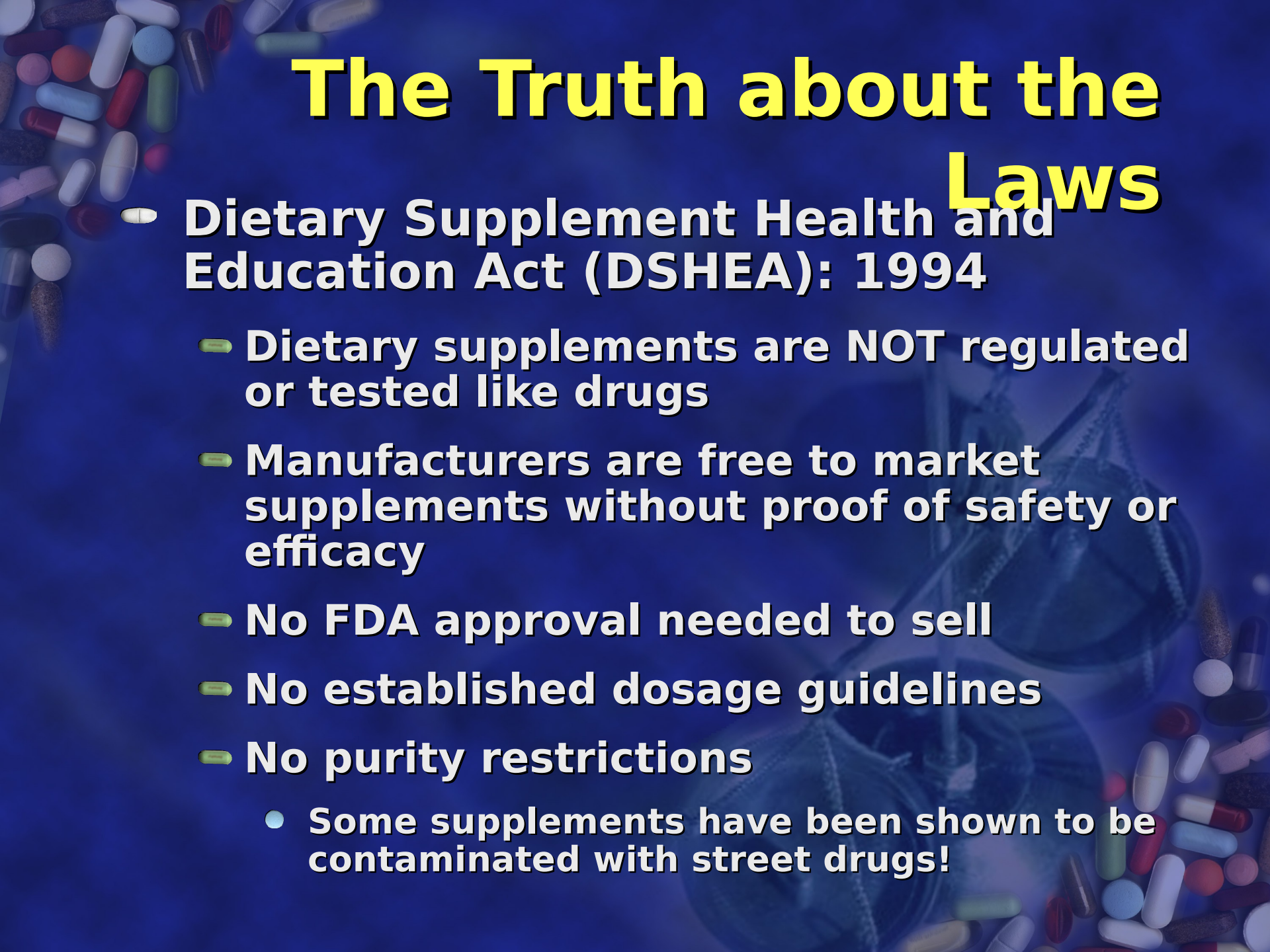
Outline

- **What is a Dietary Supplement?**
- **Use of Dietary Supplements**
- **Possible Dangers of Supplements**
- **Using Food for Power Performance**
- **Supplement Sense**

A Dietary Supplement is...

a tablet, capsule, powder, soft-gel, or liquid product that contains at least one of the following:

- Vitamin**
- Mineral**
- Herb or botanical**
- Amino acid**
- A concentrate, metabolite, constituent, or extract of any of the above**



The Truth about the Laws

- **Dietary Supplement Health and Education Act (DSHEA): 1994**
 - **Dietary supplements are NOT regulated or tested like drugs**
 - **Manufacturers are free to market supplements without proof of safety or efficacy**
 - **No FDA approval needed to sell**
 - **No established dosage guidelines**
 - **No purity restrictions**
 - **Some supplements have been shown to be contaminated with street drugs!**

Do *YOU* Need a Dietary Supplement?





When You *May* Need a Dietary Supplement

- You eat a very low-calorie diet
- You eat an all-plant diet (vegan)
- You are in a certain stage of the life cycle (e.g., a pregnant, breastfeeding or childbearing-age woman)
- Your doctor may prescribe a supplement for you if:
 - You have a disease, infection, or injury or recently had surgery
 - You have a nutritional deficiency
 - You are taking medications that interfere with your body's use of specific nutrients



Promises, Promises

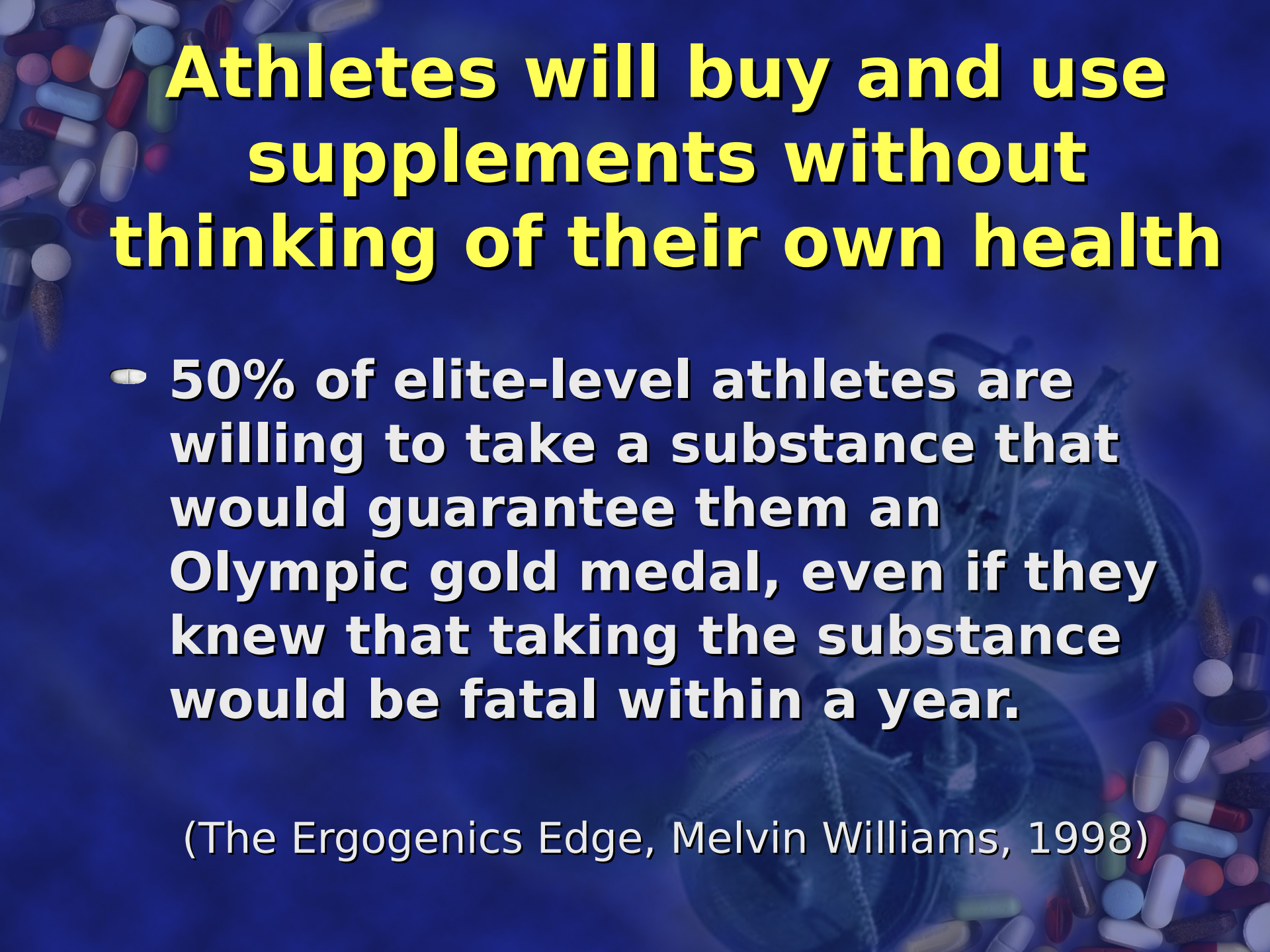
- “Naturally speed up metabolism” and “Burn fat” (Weight Loss Aids)
- “Builds muscle mass” (Ergogenic Aids)
- “Delays fatigue” and “Increases energy” (Performance Enhancers)
- “Prevents disease” (Vitamins, Minerals, and Herbs)

Why do Soldiers consume dietary supplements?

- Promote General Health
- Performance Enhancement
- Prevent Illness



Source: MAJ S Corum, MBA, RD: Dietary Supplement Consumption in Active Duty Enlisted European Population, Feb-Nov 2003. Note: Preliminary Data Analysis



Athletes will buy and use supplements without thinking of their own health

- **50% of elite-level athletes are willing to take a substance that would guarantee them an Olympic gold medal, even if they knew that taking the substance would be fatal within a year.**

(The Ergogenics Edge, Melvin Williams, 1998)

Top Vitamins & Minerals Consumed in Military

- Multivitamin
- Vitamin C
- Calcium
- Vitamin E
- Iron



Source: MAJ S Corum, MBA, RD: Dietary Supplement Consumption in Active Duty Enlisted European Population, Feb-Nov 2003. Note: Preliminary Data Analysis



Top Herbal Supplements Consumed in Military

- Ginseng
- Garlic
- Ginkgo biloba
- Echinacea
- Guarana

Source: MAJ S Corum, MBA, RD: Dietary Supplement Consumption in Active Duty Enlisted European Population, Feb-Nov 2003. Note: Preliminary Data Analysis



Top Supplements Consumed in Military in Effort to Enhance Performance

Among Men

- Creatine
- Ephedra
- Amino Acids
- Glucosamine
- Androstenedione

Among Women

- Creatine
- Amino Acids
- Ephedra
- Glucosamine
- HMB

Source: MAJ S Corum, MBA, RD: Dietary Supplement Consumption in Active Duty Enlisted European Population, Feb-Nov 2003. Note: Preliminary Data Analysis



Possible Side Effects of Supplement Use

- **Dehydration**
- **Heat-Related Injuries**
- **Nervousness and Dizziness**
- **Changes in Blood Pressure and Heart Rate**
- **Heart Attack**



Possible Side Effects of Supplement Use (con't.)

- **Strokes**
- **Seizures**
- **Psychosis**
- **Death**
- **Interaction with medications**
- **Positive drug tests due to contaminated supplement**



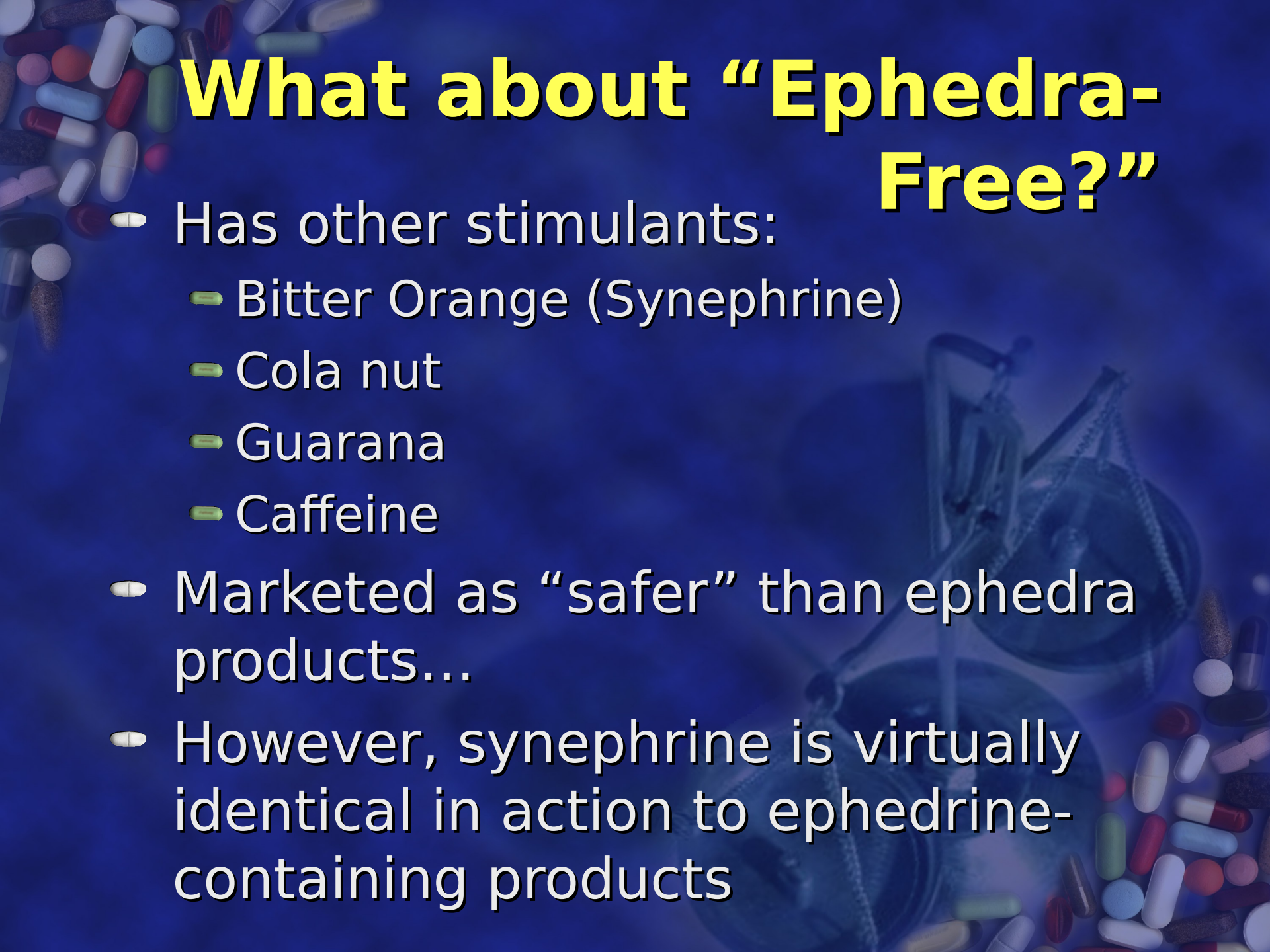
Frequency of Adverse Effects in Military Supplement Users

Dehydration	40%
Palpitations	24%
Abdominal Pain	15%
Dizziness or Confusion	13%
Numbness of Extremities	2%
Tremors	2%

Source: MAJ S Corum, MBA, RD: Dietary Supplement Consumption in Active Duty Enlisted European Population, Feb-Nov 2003. Note: Preliminary Data Analysis

Ephedrine Alkaloids

- Also called
 - Ephedra
 - Ma Huang
- Health risks may include:
 - Disturbed Sleep
 - Irregular Heartbeat
 - Seizures
 - High Blood Pressure
 - Stroke



What about “Ephedra-Free?”

- Has other stimulants:
 - Bitter Orange (Synephrine)
 - Cola nut
 - Guarana
 - Caffeine
- Marketed as “safer” than ephedra products...
- However, synephrine is virtually identical in action to ephedrine-containing products

In the News!

ALL NEW ABS
Metabolism Magic
3 ways to rev it up
"We lost a ton!"
18 women shed 2,000 pounds and tell you how

What's New?

GET LEAN GET BIG
AT THE SAME TIME p.44

STOP MISSING WORKOUTS
43 STRATEGIES p.78

ENDLESS ENERGY
20 MUST-KNOW SECRETS p.84

DROP 30% OF YOUR FAT IN 10 MINUTES p.92

LOSE 13 LBS. IN 14 DAYS!
THE SCULPT-YOUR-ABS DIET
FREE WORKOUT POSTER

MUSCLE UP IN 3 WEEKS

Who the hol's got my cash
Test stops sales at
must
insioner

holidays
club warnings

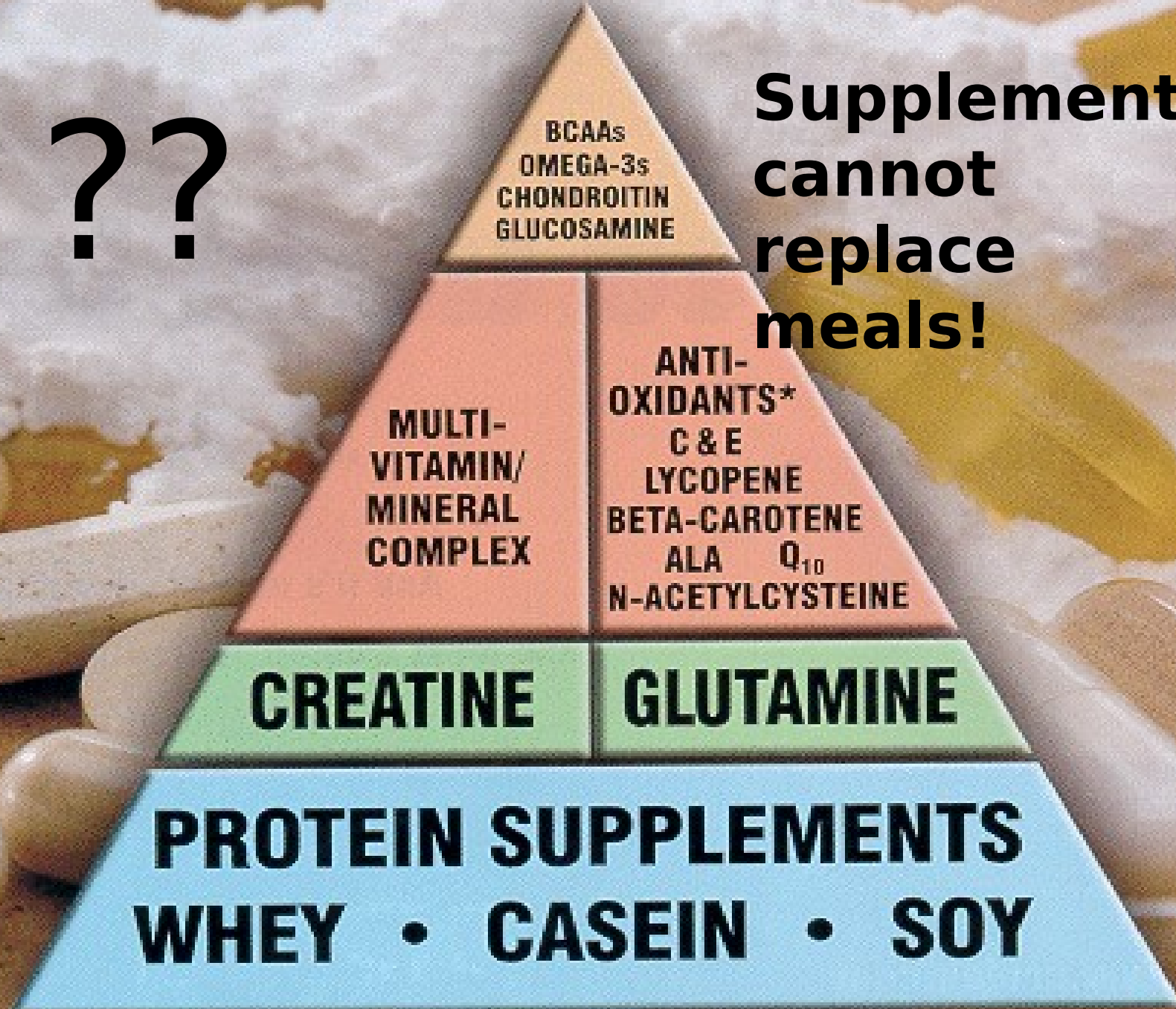
club
to
fight
justice

SC
OR'EASTER

INSTA
HEAT
FL

??

**Supplements
cannot
replace
meals!**



*Only selected antioxidants could be listed here.

Eat a Variety of Nutritious Foods



Fats, Oils & Sweets

USE SPARINGLY

KEY

■ Fat (naturally occurring and added)

▣ Sugars (added)

These symbols show fats and added sugars in foods.

**Milk, Yogurt &
Cheese Group**

2-3 SERVINGS

**Meat, Poultry, Fish, Dry Beans,
Eggs & Nuts Group**

2-3 SERVINGS

Vegetable Group

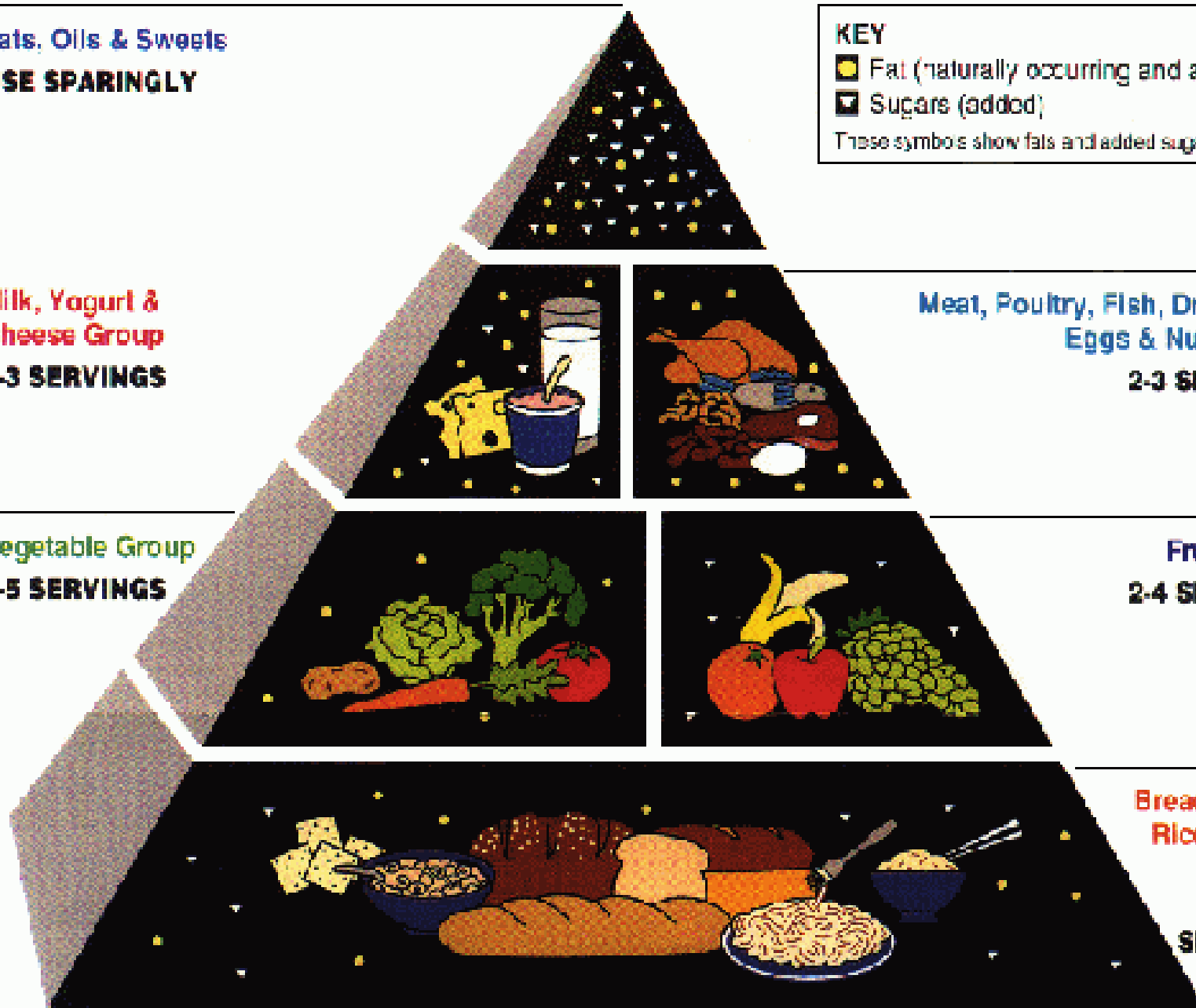
3-5 SERVINGS

Fruit Group

2-4 SERVINGS

**Bread, Cereal,
Rice & Pasta
Group**

**6-11
SERVINGS**



The background of the slide is a dark blue gradient. In the top-left corner, there is a cluster of various pills and capsules in different colors (white, red, blue, green, brown). In the bottom-right corner, there is a pile of more pills. In the center-right, there is a faint, semi-transparent image of a mechanical scale or balance.

Getting Power Performance

- Talk to a registered dietitian
- Eat meals and snacks before and after performance to refuel your muscles
- Use whole foods: fruits, vegetables, starches, and dairy foods to fuel your body



Getting Power Performance

- Carbohydrates are the best source of energy
- Target sports diet = 60% carbohydrate
- To increase muscle, focus on extra strength training with *adequate* protein
- Research shows athletes do NOT need more vitamins/minerals than non-athletes.



Getting Power Performance: Snacks

- Best pre-exercise snacks are:
 - Rich in carbohydrates
 - Low in fat
 - Moderate in protein
 - High in fluids
 - In appropriate portions
 - Favorite foods that settle well in your stomach



Getting Power Performance: Water

- Dehydration Hurts Performance
 - Water is best if exercising for less than 60 minutes
 - For exercise periods greater than 60 minutes, use a water + light carbohydrate drink
 - For each pound lost during workout, replace with at least 16 ounces of fluid.
 - Avoid caffeine and alcohol



Choose Food Instead of Supplements

Food

Fun

Offers variety

Doesn't have to be expensive

Contains other healthful substances

Safe

Supplements

Boring

Lacks variety

Can cost a lot of money

Doesn't contain other health benefits

Can be dangerous to your health



Is this a Credible Source?

“...The initial blood pressure rise is small, mortality statistics are tiny for ephedrine with or without caffeine,...”

Source: *Muscle & Fitness Online*



Guidelines for Using Supplements

- **Get objective information from a professional such as a Registered Dietitian, Nurse, or Doctor**
- **Obtain your health care provider's approval**
- **Read the label carefully**
- **Do not exceed dosage recommendations**
- **Discontinue use if you experience adverse side effects and report these to the FDA**



Guidelines for Using Supplements (con't.)

- **Purchase supplements from reliable producers**
- **Be aware of sensational claims**
- **Do not take supplements if you are pregnant, breastfeeding, or taking prescription medications**

Other Reliable Resources

- **Uniformed Services University of the Health Sciences pamphlet on nutritional supplements**
 - <http://www.usuhs.mil/mim/ergopam.pdf>
- **U. S. Army Center for Health Promotion and Preventive Medicine**
 - <http://chppm-www.apgea.army.mil/dhpw/Wellness/dietary.aspx>
- **FDA Center for Food Safety and Applied Nutrition**
 - <http://www.cfsan.fda.gov>
- **NIH Office of Dietary Supplements**
 - <http://ods.od.nih.gov>

Reliable Resources (cont.)

- Hooah4Health.com
- Navy Environmental Health Center
 - <http://www-nehc.med.navy.mil/hp/nutrit/index.htm>
- National Center for Complementary and Alternative Medicine
 - <http://nccam.nih.gov>
- Tufts Nutrition Navigator (Critical review of supplement web sites)
 - <http://www.navigator.tufts.edu/>



For more information about Nutrition for Power Performance:

- COMPLETE WITH
INFORMATION SPECIFIC TO
INSTALLATION**